Celebrating 50 Years of Service to New Jersey



NJ HE 213 N5 N49 2016b C.3

Governor Chris Christie



Commissioner Richard T. Hammer



Celebrating 50 Years of Service to New Jersey



1966 ⊙ 2016

December 2016

NUDOT RESEARCH LIBRARY



The year was 1966. *Bonanza* was the most popular show on television. *The Bible* was the top grossing film. Gasoline cost 32 cents per gallon. The average cost of a new car was about \$2,600. The country was just beginning a cultural and social upheaval that would last past the end of the decade and redefine American life.

The year 1966 also was the year that the New Jersey Department of Transportation (NJDOT) was born. In 2016 we mark its

50th Anniversary, and in this commemorative book we take a moment to look back on the history of this remarkable agency.

The NJDOT was created as the New Jersey Highway Department in 1920, but it was almost a half-century later when it merged with the State Bureau of Aeronautics and the newly-conceived Commuter Operating Agency (a precursor to NJ TRANSIT) to form the NJDOT. We were the very first state transportation agency to be established in concert with the new U.S. Department of Transportation, which was created in October 1966.

The inception of the NJDOT was more than just a merger of related state transportation agencies. It was a recognition that the newly formed organization had a responsibility for an integrated transportation network, rather than being only a caretaker of the highway system. With the relocation of the Office of Maritime Resources to the NJDOT in 1999, we truly became a multi-modal agency.

New Jersey has an undeniably rich transportation history that includes many "firsts." The first stagecoach service in the nation began here. The world's first steam ferry service started here. The first hot air balloon flight in America landed here. And the first asphalt pavement in the nation was laid here. We also are the first state in the nation to officially recognize and take responsibility for roadway improvements. We also have been in the forefront of innovative highway design efforts including the construction of the first traffic circle and the nation's first cloverleaf interchange. Our engineers were responsible for developing the ubiquitous concrete safety barricade that is universally known as "Jersey Barrier."

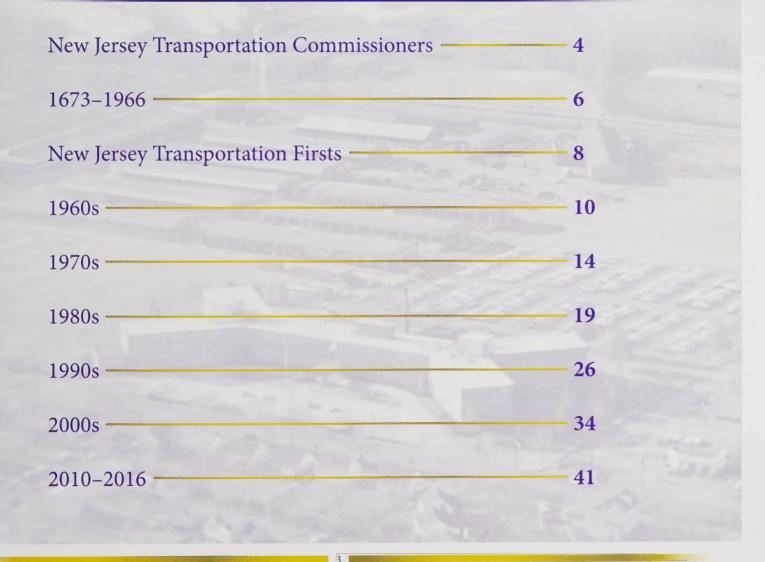
There have been many changes to the way we conduct business and manage projects. Materials and methods of roadway and bridge construction have improved greatly, especially as technology has improved. Among the most significant changes here at NJDOT was the reorganization in 1995 to create a "cradle to grave" system of project management.

Over the past 50 years we have dramatically shifted our main focus from that of a system builder to a system maintainer. We have not built a major road on a new alignment for nearly 20 years, and our aging infrastructure demands more and more of our resources annually. In the past 50 years we have dramatically changed the way we administer our projects, as well as altered the way we do business in conjunction with the rapid development of communications and office technologies.

This look back on our first 50 years will certainly be nostalgic, but I also hope that it will be inspirational. The NJDOT and its employees bear a great legacy; one of building the first-rate transportation system that New Jersey enjoys today, and one of being the most dynamic, versatile, and professional workforce in state government.

> Richard T. Hammer Commissioner

Table of Contents



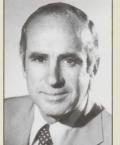
New Jersey Department of Transportation Commissioners



David J. Goldberg 1966–1970



John C. Kohl 1970–1974



Alan Sagner 1974–1977



Russell Mullen* 1977–1978



Louis J. Gambaccini 1978–1981



Anne P. Canby 1981–1982



John P. Sheridan, Jr. 1982–1985



Roger A. Bodman 1985–1986

Hazel Frank Gluck

zel Frank Gluck 1986–1989



Robert Innocenzi* 1989–1990



Tom Downs 1990–1993



Kathy Stanwick* 1993–1994



Dennis Keck* 1994



Frank J. Wilson 1994–1996



John J. Haley 1997–1998



James Weinstein 1998–2001



Jamie Fox 2002, 2014–2015



Jack Lettiere 2003–2006



Kris Kolluri 2006–2008



Stephen Dilts 2008–2010



James S. Simpson 2010–2014



Joseph Bertoni* 2014, 2015



Richard T. Hammer 2015–present



State Highway Commissioners



1935–1942 **E. Donald Sterner** Belmar



1942–1950 **Spencer Miller, Jr.** South Orange



1950–1954 **Ransford J. Abbott** Red Bank



1954–1966 **Dwight R. G. Palmer** Short Hills

Milestones

1673

The General Assembly passes the first Public Road Act.

1676

Construction of a road begins from Piscataway to Middletown.

1870

First use of asphalt pavement in Newark.

1891

A state-aid program (first in the nation) grants money to the counties for road construction.

1894

Governor **George Werts** appoints **Edward Burrough** the first Commissioner of Public Roads.

1906

State issues first license plates.

1912

The Legislature establishes the State Highway System not to exceed 1,500 miles of roadway.

1919

The term "air-port" was first used to describe Atlantic City's Bader Field.

ense plates.







1925

Interstate bus commerce begins between New York and New Jersey.



1925

Construction begins on the first traffic circle in the nation-Airport Circle in Pennsauken.



Construction of the first "clover leaf" at Routes 1&9 and Route 35 in Woodbridge.

1926

Motor Vehicles registers 529,089 vehicles.



New Jersey: First in Transportation Technology

1772 The first stagecoach service

1793 The first balloon flight in America landed in Deptford

1811 The first regular steam ferry service, Hoboken—



1825 The first to operate a "steam wagon" jitney

1837 The first steam locomotive manufactured in America

1848 The first cable manufactured for suspension bridges

1851 The first bridge in the country used for interstate railroad traffic

1891

The first state in the nation to establish a fund to help counties in the construction of highways

1897 The first submarine constructed in America



1900 The first submarine purchased by the United States Navy

1909 The first airplane manufacturing plant, Paterson

1915 The first right of way procedure for transportation

1927 The first tunnel for subaqueous vehicular traffic –



1931

The longest man-made steel arch bridge constructed in the world at the time of completion, Bayonne Bridge

New Jersey: First in Transportation Technology

1935

The first air route traffic control center, Newark

1956

The first intermodal container service launched in the world. Newark

1959

The first scientifically-designed highway barrier used to separate opposing lanes of traffic and reduce head-on collisions, known as "Jersey Barrier"

1966

The first state transportation agency

1967 The first highway mileposts installed

1969 The first breakaway signs developed

1972

The first to develop traffic metering systems to control congestion

1982

Arlene Butler Feldman was appointed as Director of the Division of Aeronautics, the first female to hold the position in the state and in the nation -

1986

The first national wildlife bridges, I-78

1992

The first to create the nation's first Wetlands Bank

1992

The first to initiate a hazardous waste disposal contract for waste generated by operations

1993

The first to enact legislation for an Employer Trip Reduction (ETR) program

1993

The first to test electronic approval of documents between NJDOT and the Federal Highway Administration





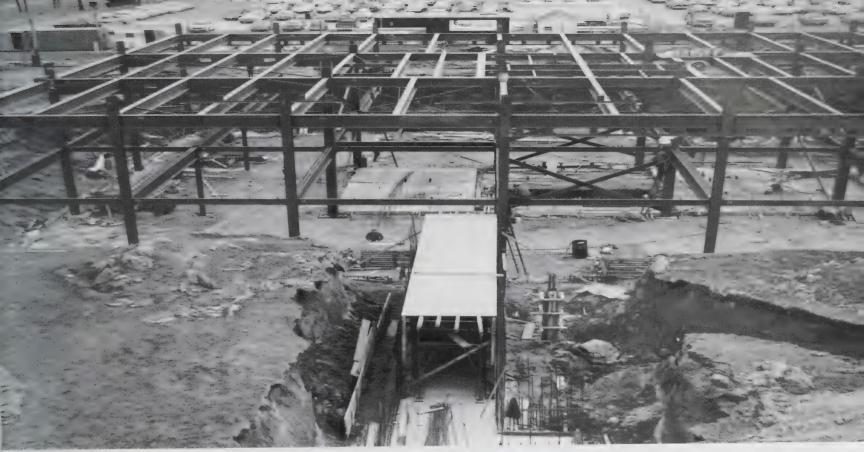


1960s

NEW JERSEY DEPARTMENT OF TRANSPORTATION



New Jersey Legislature passed the Transportation Act that created the New Jersey Department of Transportation. It transferred the State Bureau of Aeronautics and established the Commuter Operating Agency to provide commuter rail service. Commissioner **David J. Goldberg** (fifth from left) with NJDOT Leadership. (1966)



Construction of Finance & Administration Building. (1967)



NJDOT participated in the development of a snowplowable raised reflective pavement marker. (1967)



The NJDOT logo unveiled. (1968)



First run of commuter trains over Penn Central track. (1968)



Dorothy Andres hired as first female engineer in 1964.



Route 29 Construction (1969)



Trenton Train Station (1968)



Diagrammatic traffic signs installed at the I-287 and Route 22 interchange – the first such signs used in New Jersey. (1969)

1969 marks beginning of Greatest Road Construction Program – The award of eight construction contracts totaling \$36.8 million... at the time, the largest dollar amount of contracts ever to be awarded at one time.



First to develop an optimum chemical pre-mix for snow removal. (1968)



The breakaway coupling for large highway signs developed by NJDOT Engineer **Richard A. Strizki**. (1969)

1970s



NJ TRANSIT Corporation Board of Directors in 1979. Commissioner Louis J. Gambaccini (second from right)



Public Transportation Act established NJ TRANSIT in 1979. Commissioner Louis J. Gambaccini (left) and Governor Brendan T. Byrne (third from left)



TRANSIT

NJ TRANSIT purchased 230 electric, multiple unit railroad passenger cars. (1978)

NJ TRANSIT

NJ TRANSIT continues to be the only statewide public transportation system in the nation. Covering a service area of 5,325 square miles, NJ TRANSIT is the nation's third largest provider of bus, rail, and light rail transit, linking major points in New Jersey, New York, and Philadelphia. The agency operates more than 2,000 buses, 700 trains, and 45 light rail vehicles on 236 bus routes and 12 rail lines statewide, providing nearly 223 million passenger trips each year.



NJ TRANSIT made the world's largest single bus purchase of 779 buses which were used by private bus operators under a grant program. (1976)



Distributed first of 88 vans to non-profit organizations for the transportation of the elderly and handicapped. (1976)



Commissioner Alan Sagner (second from left) and Governor Brendan T. Byrne (third from left) (1976)





First metric speed limit signs installed in anticipation of a new law. (1976)



New federal standards for signs were adopted, including the introduction of a sign with diagonal slash. (1972)



A pavement milling machine on Route 1. (1974)



NJDOT began photologging 4,000 miles of highway in 35mm (previously on 16mm) film. (1975)

ALLEGHENY COMMUTER

Bader Field Aviation Assessment Study (1979).

Bureau of Aeronautics

NJDOT, through its Bureau of Aeronautics, has oversight of 43 public use airports and about 400 restricted use facilities, including airstrips, heliports and balloon ports. The State Department of Aviation was created in 1931 as a stand-alone agency before being incorporated into the Department of Conservation and Economic Development in 1948. In 1966 it was combined with the State Highway Department to form the NJ Department of Transportation.



JAIDING

Helistop (1974)



Aviation Improvement Plan in Ewing Township (1975)



Governor Brendan T. Byrne (second from left) and Commissioner Louis J. Gambaccini (right) opened Route 18 freeway in Colts Neck. (1979)

Commissioner Louis J. Gambaccini (left) and Governor Brendan T. Byrne (right) attended the I-195 opening, which was completed east to Squankum Road. (1979)

1980s



The last 3.6 miles of the 18-mile I-280 opened, the third interstate built through New Jersey. (1980)



Anne P. Canby became the first female NJDOT Commissioner in 1981.



The first High Occupancy Vehicle lane in NJ opened on the Garden State Parkway for 12 miles, from exit 129 to exit 141. (1980)





Commissioner **Hazel Frank Gluck** announced "Don't Trash NJ" campaign. (1988)



Archaeologists dig up Abbott Farm site in preparation for the I-295 Trenton Complex. (1983)



NJ TRANSIT bought Transport of NJ, the state's largest bus company. (1981)



NJ TRANSIT introduced handicapped-accessible 'kneeling buses' in South Jersey. (1983)





NJ TRANSIT authorized a \$2.7 million purchase of new buses. (1983)



Commissioner Hazel Frank Gluck (fourth from left) opened DOT TOT, the state's first employee child care center, at NJDOT. (1987)



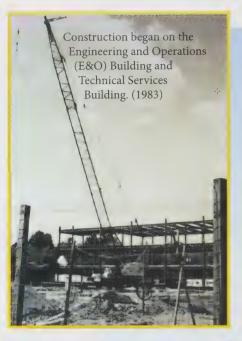
Grand opening of the re-electrified 67-mile Morris and Essex rail line, first conceived by NJDOT planners in 1969. (1984)



Dorothy Andres created the NJ Snow Plow Rodeo. (1983)



First NJDOT vanpools were formed – 11 vans debuted with about 120 riders. (1980)



In 1986, staff began moving into the new E&O Building, consolidating employees from 14 different geographical locations. The move was completed in 1987.

ENGINEERING

OPERATIONS

AUGUST 1987

Capital Program Management

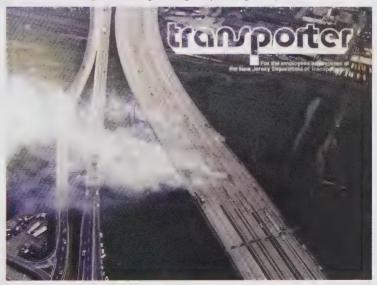
One of NJDOT's core functions is to maintain New Jersey's highways and bridges in a state of good repair. The Capital Program Management (CPM) unit effectively and efficiently manages projects from identifying a need through the concept development and design phases through construction. CPM is responsible for managing hundreds of projects that may range from a small culvert replacement to the \$1 billion Pulaski Skyway Rehabilitation.



The Task Force on Women in Construction was created to increase the percentage of women working in highway and bridge construction. (1987)



A trash fire burned for three days under the Frelinghuysen Avenue Bridge on I-78 near Newark, a main route to NYC and Newark Liberty International Airport, closing the highway for eight days. (1989)





Governor **Tom Kean** (second from right), Commissioner **John P. Sheridan**, **Jr.** (right) and members of the New Jersey Legislature celebrate enacting the historic Transportation Trust Fund Authority Act, the first reliable, stable funding source in decades. (1984)



NJDOT opened the 5.5 mile missing link of I-78, completing the 67-mile interstate from the Holland Tunnel to the Delaware River. It included more environmental safeguards than any other road construction ever undertaken in New Jersey, including the first national wildlife bridges. (1986)



NJDOT launched an internal recycling program. (1985)



NJDOT opened the 5.5 mile section of I-295 connecting to I-195, as part of the Trenton Complex. (1987)







Commissioner **Frank J. Wilson** (right) promoted the *Wipers on Lights on* campaign. (1996)

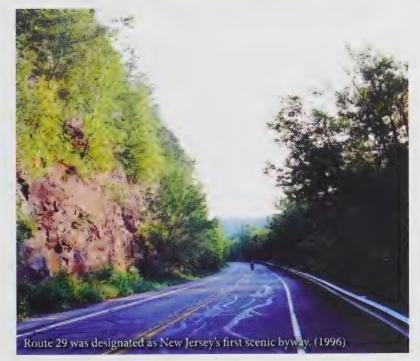


DOTNET, NJDOT's internal computer network debuted. (1994)



The Adopt-A-Highway Program began in May. (1991)







Commissioner Frank J. Wilson (second from left) and Governor Christine Todd Whitman (third from left) attended the opening ceremonies for the Trenton Complex. (1994)



NJDOT opened the final section of Route 18, linking to Route 36 and providing 40 continuous highway miles from New Brunswick to Wall Township. (1991)





Commissioner Frank J. Wilson launched the Mast Arm Signs program. (1996)



NJDOT's Sign Shop poses with Governor **Christine Todd Whitman** (sixth from left) in front of the "Welcome to New Jersey" sign. The Battleship USS *New Jersey* docked in Camden in 1999.



The Give Us A BRAKE, Slow Down! campaign (1990)



Motor Vehicle Services merged with NJDOT. (1995)





Variable Message Signs began using a fuel cell system. (1996)





The New Jersey Venturer electric vehicle won the Engineering Excellence Award and Green Car Award in the Northeast Sustainable Energy Association's Tour de Sol rally. (1999)

30



New Jersey voters approved a \$500 million Bridge Bond in 1999 for bridge repairs and other transportation projects.



Route 4 and 17 Reconstruction (1999)



The Office of Maritime Resources is transferred to NJDOT from the Commerce and Economic Growth Commission. (1999)

Office of Maritime Resources

The Office of Maritime Resources (OMR) promotes coordination and cooperation among state, federal, regional and non-governmental agencies and oversees dredged material management in a way that balances development and protection of the ecosystem and advocates and plans for continued development and growth of New Jersey's Marine Transportation System.



Commissioner **Tom Downs** (left) and Governor **Jim Florio** (third from left) opened the final 20.4 mile section of I-287, an 89-mile bypass to avoid New York City congestion, which runs from Outerbridge Crossing to the New Jersey/ New York border, connecting to the NY State Thruway in Suffern, NY. (1993)



Operations

NJDOT Operations is the public face of the department on a day-to-day basis maintaining our state highways and bridges. Split into three regions—North, Central, and South—there are more than 1,000 employees and 76 yards and garages. Highway Operations Technicians do everything from repairing potholes and other infrastructure, to mowing, litter pick up, graffiti removal, maintenance and repair of traffic signals, overhead lights, and signs, as well as snow removal and assisting during times of emergency.



Hurricane Floyd caused major damage on New Jersey's roadways such as sinkholes on Route 23, I-78 and Route 9W and a bridge collapse on Route 46 in Little Falls, closing eastbound Route 46 for six days. (1999)





The initial 5.3 mile Diamond Express High Occupancy Vehicle lane opened on I-287 in 1994. The second segment opened in October 1996, extending the HOV lane to 12 miles. The final section opened in 1998 (one year ahead of schedule) making the 21-mile HOV lane one of the longest in the nation.

The Hudson-Bergen Light Rail Transit System: a 20.5 mile system between Bayonne and Ridgefield Park opened its first segment between Jersey City and Hoboken. (1999)

T

MTRANSIT,

2027B

I LIPPLY

MTRAHSIT /

20188

||

2000s



Commissioner **James Weinstein** (seventh from right) cut the ribbon for the NJDOT Employee Memorial, which was built by Department employees. The memorial honors those NJDOT employees that were killed while performing their duties. There are currently 36 names on the memorial. (2000)



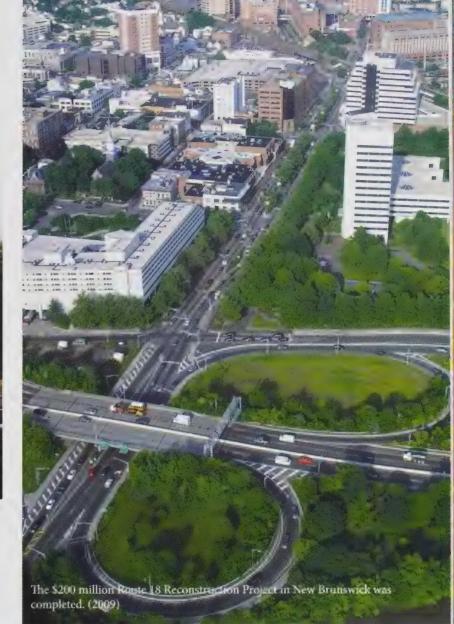
Search and Rescue dog, Kobie







The Route 35 Coopers Bridge, which employed Context Sensitive Design (CSD) techniques before CSD was recognized as a process, opened in May. (2000)



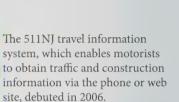
The new state-of-the-art Statewide Traffic Management Center (STMC) opened in Woodbridge. (2008)

Transportation Systems Management

Transportation Systems Management (TSM) is responsible for ensuring the safe and reliable movement of people and goods on New Jersey's highways. This is accomplished using technology, such as Intelligent Transportation Systems (ITS) that collects data and controls traffic systems throughout the state, and monitoring traffic through Traffic Operations Centers and provide real time traffic information to motorists. TSM also works with the NJ State Police to oversee the Traffic Incident Management training for First Responders in order to safely and efficiently clear incidents to minimize the disruption to traffic.

36

The Garden State Parkway and the New Jersey Turnpike merged consolidating two of the largest toll authorities in New Jersey. (2003)









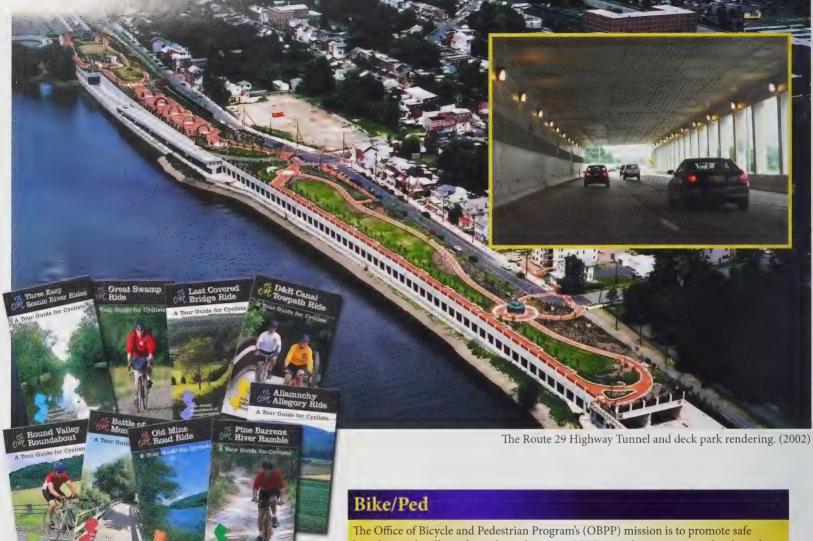
The NJDOT complex was dedicated to **David J. Goldberg**, NJDOT's first Commissioner, in 2002. On hand for the ceremony were members of his family.





The E&O Building was formally dedicated as the **Jack Friedenrich** Engineering and Operations Building. At the time, he was the longest serving State Highway Engineer, serving from 1971–1988. Commissioner **Stephen Dilts** (left) and members of Jack's family attended the dedication ceremony. (2009)





NJDOT produced nine new biking tour guides containing cyclist friendly maps and information for locations around New Jersey. (2003) The Office of Bicycle and Pedestrian Program's (OBPP) mission is to promote safe bicycling and walking throughout the state. OBPP provides resources and technical assistance to communities to encourage bicycle and pedestrian safety, including Complete Streets policies that promote safe accommodations for bicyclists, pedestrians, transit riders, and the mobility impaired. The office also produces online bicycle tour guides and administers the Safe Routes to School Program.



The first part of a four-part project, a new span, the Ellis Vieser Bridge opened in 2002 carrying Route 9 southbound traffic. The reconstructed Edison Bridge carrying Route 9 northbound traffic opened in 2003.



Victory Circle elimination and Victory Bridge replacement project were completed in 2005.





NJDOT replaced three superstructure bridges – Mulberry Street, Route 1 Freeway and the Olden Avenue Connector – using the Hyperbuild approach. A traditional design-phase approach would have taken 26 months to complete, but this first Hyperbuild project saved 14 months in time and \$1 million in costs for the design. (2005)



NJDOT opened the new northbound bridge of the Route 52 Causeway in April 2008.



Commissioner **Stephen Dilts** (fourth from left) broke ground on the \$251 million Route 52 Causeway Contract B in September 2009, and the project was completed in 2012.

2010-2016





Route 35 severely damaged by Superstorm Sandy. (2012)

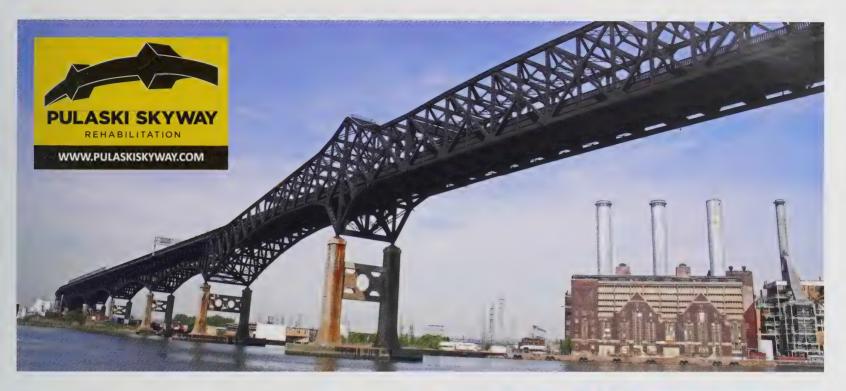


Superstorm Sandy

On October 29, 2012, Superstorm Sandy slammed into New Jersey causing extensive damage to the state, including washing away much of Route 35 when the Barnegat Peninsula was breached in three places where the Atlantic Ocean cut through to the Bay. Under three separate contracts in about two years, NJDOT completely rebuilt 43 lane miles of highway over a 12.5 mile distance, built a new drainage system that includes 42 outfalls and nine pump stations that filter the water before draining into Barnegat Bay, and installed nearly 75 miles of new gas lines, drainage, water, and sewer pipes. The new roadway is a full depth reconstruction that is designed to last for 50 years.



Route 36 Highlands Bridge Replacement (2010)



Pulaski Skyway

The \$1 billion Pulaski Skyway rehabilitation project is the largest project in terms of cost NJDOT has ever undertaken. It is being advanced through 10 separate construction contracts that began in 2012 and is expected to be completed by 2020. The 3.5-mile bridge opened in 1932 and carries Route 1&9 from Newark to Jersey City over the Hackensack and Passaic Rivers. In 2014, the northbound lanes were closed so the original 82-year-old deck could be replaced. In 2016, the southbound traffic was shifted onto the newly completed northbound lanes so the southbound deck could be replaced. The massive improvement project, which also will rehabilitate the superstructure and substructure, will extend the life of the Skyway by 75 years.



Winter Operations

"The New Jersey Department of Transportation is proud to answer the call for assistance from Massachusetts by sending NJDOT crews and equipment in advance of another major storm," NJDOT Commissioner **Jamie Fox** said in a February 2015 press release. "New England has been hit with historic snowfalls this winter. New Jersey is in a position to help and our crews will complement Massachusetts's efforts to keep their roads clear and safe for motorists." (2015)



Complete Street



Incomplete Street

Complete Streets

NJDOT was one of the first in the nation to adopt a Complete Streets policy and has been recognized as a national leader in the area. Adopted in December 2009, NJDOT's policy requires that future roadway improvement projects include safe accommodations for all users, including bicyclists, pedestrians, transit riders and the mobility-impaired.



NJ TRANSIT Executive Director **James Weinstein** (left) and Commissioner **James S. Simpson** (right) used the first pedestrian hybrid beacon in New Jersey, which was installed on Route 27 at Magnolia Road to access the Metropark rail station in Woodbridge. (2012)



NJDOT completed the Route 52 Causeway Bridge Replacement project which connects Somers Point and Ocean City. The project began at the intersection of Routes 9 and 52 in Somers Point, continued through the Somers Point Circle (which was eliminated in this project) and over the Great Egg Harbor to Ocean City at Ninth Street and Bay Avenue. Two fixed and two moveable bridges were replaced by two bridges that have two high fixed spans over Ship Channel and Beach Thorofare with a touchdown point on Rainbow Island. (2012)



NJDOT and NJ TRANSIT supported the first "mass transit" Superbowl at Met Life Stadium. (2014)





NJDOT and NJ TRANSIT supported the Papal visit in Philadelphia. (2015)





Direct Connection

The I-295/I-76/Route 42 Direct Connection project began in 2013 and is the largest project NJDOT has ever undertaken in South Jersey. It will provide a seamless route for I-295 motorists traveling through the interchange of I-295, Route 42 and I-76 in Bellmawr, Mt. Ephraim and Gloucester City. The project is anticipated to be completed in 2023.



NJDOT Commissioners celebrate the Department's 50th Anniversary

Joseph Bertoni, Jamie Fox, Dennis Keck, Anne Canby, Roger Bodman, Jack Lettiere, Richard Hammer, Kris Kolluri, Stephen Dilts, Russ Mullen, Hazel Frank Gluck, Jim Weinstein and Robert Innocenzi (left to right)



Through the years, NJDOT has celebrated many employee related activities such as Take your Children to Work Day, Diversity Day, Season of Service, Golf tournament, and many cultural events.

50th Anniversary Employee Appreciation Picnic and Events







NJDOT's 2016 Senior Staff, Bill Kingsland, Jeanne Victor, Dave Lambert, Andrew Tunnard, Commissioner Richard Hammer, Johanna Barba Jones, John Case, Gary Brune, Joseph Bertoni and Dave Kuhn. (left to right)



NJOOT RESEARCH LIBRARY

